

The FCC's repeated refusal to consider biological effects from exposure to all types of wireless radiation shows a clear and dangerous intention to disregard the emerging science which must inform its decisions regarding public health.

The agency's reliance on organizations of physicists and engineers for advice on human exposures has resulted in a sole focus on "thermal" effects, despite thousands of published, peer-reviewed studies showing biological harm, even at non-thermal levels, for various frequency ranges.

The FCC's own admission that it is unaware of any other types of effects demonstrates a failure to actively investigate the issue by proactively engaging with the scientific community studying the short and long-term biological impacts of exposure to humans and possible interference with systems of the natural world. Failure to seek out and consider the latest science makes decisions of the FCC suspect.

Moreover, the complex comment process used by the FCC virtually ensures that most commenters will be those who follow the activities of the agency closely and have a financial interest in the agency's decisions.

I do not support the proposed change to allow manufacturers to produce wireless devices that govern their own radiation power output, especially for notebooks and tablets frequently used by children who, according to the International Agency for Research on Cancer (IARC), are more vulnerable to RF radiation than adults.

Since the justification for this proposed rule change is that manufacturers want to be able to deliver more data to notebooks and tablets, it seems obvious that this change would result in higher exposures for users.

I object to the practice of allowing exposures to be averaged over time to comply with FCC exposure limits. There is no scientific basis to support the notion that short, periodic bursts of RF radiation are not biologically harmful, or that only cumulative effects over time may have an impact. The FCC should establish temporal limits for both Specific Absorption Rate (SAR) and power density.

Further, I agree with the American Academy of Pediatrics that the FCC's current method of testing wireless devices is not reflective of the way people actually use technology today. Given the increasing use of wireless devices by children and adolescents, we encourage the FCC to seek out and utilize testing protocols that reflect real-world situations.

I recommend that before the agency considers even tentative approval of WPT devices operating at ranges in excess of 50 cm, it requires manufacturers to conduct pre-market testing to demonstrate the safety of such devices when used in all possible “worst case” scenarios, including mitigation techniques to avoid inadvertent or collateral damage to the public. Such an analysis must include consideration of biological impacts.

The issues here are very significant. How will this impact an older person with an implanted cardiac pacemaker who uses a remote charger to charge his cell phone while he is moving around with the phone in his shirt pocket? Or consider the couple trying to get pregnant if the man's phone is frequently being charged wirelessly in the front pocket of his pants, with the beam irradiating his testicles?

What kind of human is the FCC considering protecting? What size, shape, age, and with what kind of underlying medical problem or weakness? I urge the agency to consider updating its standard anatomical models to reflect the wide

variety of possible users.

As someone who has been highly affected by EMF's I have a clear understanding of what these technologies are doing to our bodies. I'm concerned for the well-being of my daughter who is still young and growing. I had to move out of the San Diego area that I loved because I couldn't go anywhere without being affected. This is only going to get worse until we stop blanketing the earth with 5G. Let's save the animals and people too!